Amendments to the Claims

Claims 1-59 (Canceled).

60. (Previously presented) A method of diagnosing human cancer in a patient comprising:

(a) detecting amplification, rearrangement or increased expression of a MAC117 gene in a tissue or tumor cell sample from said patient by hybridizing nucleic acid derived from a tissue or tumor cell sample of said patient with a nucleic acid probe of the MAC117 gene, the amplification, rearrangement or increased expression of said MAC117 gene indicating the presence of human cancer in said patient; or

(b) detecting abnormal expression of the protein product of the MAC117 gene by reacting a body sample of said patient with antibodies having specific binding affinity for at least a portion of the protein product, the abnormal expression of said protein product of said MAC117 gene indicating the presence of human cancer in said patient.

61. (Previously presented) A method of classifying cancers comprising:

detecting amplification or increased expression of a MAC117 gene wherein the MAC117 gene contains either a nucleotide sequence encoding the amino acids encoded by the 423 nucleotides set forth in Figure 1 or the restriction pattern set forth in Figure 5A, in a tissue or tumor sample containing cells from a patient diagnosed with cancer, or abnormal expression of a protein product of said MAC117 gene by reacting a body sample from a patient diagnosed with cancer with antibodies having specific binding affinity for a least a portion of the MAC117 protein product, and

classifying those cancers from patients whose body samples show amplification or increased expression of said MAC117 gene or abnormal expression of the protein product of said MAC117 gene as being correlated with amplification of the MAC117 gene or increased expression of the protein product of the MAC117 gene.

Claim 62 (Canceled).

Claims 63-67 (Not entered).

68. (New) A method of classifying cancers comprising:

(a) detecting amplification or increased expression of a MAC117 gene, wherein the MAC117 gene contains either a nucleotide sequence encoding the amino acids encoded by the 423 nucleotides set forth in Figure 1 or the restriction pattern set forth in Figure 5A, by hybridizing nucleic acid derived from a tissue or tumor sample containing cells from a patient diagnosed with cancer with a nucleic acid probe of the MAC117 gene, or

(b) detecting abnormal expression of a protein product of said MAC117 gene by reacting a body sample from a patient diagnosed with cancer with antibodies having specific binding affinity for a least a portion of the MAC117 protein product, and classifying those cancers from patients whose body samples show amplification or increased expression of said MAC117 gene or abnormal expression of the protein product of said MAC117 gene as being correlated with amplification of the MAC117 gene or increased expression of the protein product of the MAC117 gene.

69. (New) A method of detecting a MAC117 gene, the method comprising: hybridizing nucleic acid with a nucleic acid probe of the MAC117 gene.